

## REMARKS

Claims 1 and 4-27 are pending in the present application. Claims 10-23 and 25-27 are withdrawn from further consideration as being drawn to non-elected subject matter. Claims 1, 4 and 8 have been amended and claims 2 and 3 have been cancelled.

Claim 1 has been amended to delete reference to the peptides recited in original clause (b) of the claim, and to incorporate the limitation of cancelled claim 3. Claims 1, 4, and 8 were also amended to clarify that the peptide has the same substrate specificity as SEQ ID NO: 1. Support for this amendment is found in the specification at pages 3-4 and in the original claims. No new matter is added by these amendments.

### **I. Objections to the Specification.**

The specification was objected to because there were sequences described in the specification that were not included in the Sequence Listing. The specification has been amended to add sequence identification numbers (SEQ ID NO) after several short sequences disclosed in the application but not previously listed in the Sequence Listing. A new Sequence Listing, including all sequences identified in the specification has also been submitted, concurrent with this Response, to Mail Stop Sequence. Please amend the specification to enter the new Sequence Listing. The revised sequence listing does not add new matter.

The Office Action also raised objection to the Abstract. The Abstract has been amended to describe the presently claimed invention.

The amendments to the specification described above render the present objections moot. Accordingly, the objections to the specification and abstract should be withdrawn.

### **II. Objections to the Claims.**

Claim 1 was objected to because the recitation of "the sequence" purportedly lacks antecedent basis. The claim has been amended to recite "a sequence" as suggested by

the Examiner, and this objection should be withdrawn.

**III. Rejection under 35 U.S.C. §101.**

Claim 1 was rejected under 35 U.S.C. §101 because the claim encompassed naturally occurring cellular proteins. The preamble of claim 1 has been amended to recite "An isolated peptide" as suggested by the Examiner, rendering this rejection moot. Accordingly, this ground for rejection should be withdrawn.

**IV. Claims 1, 4-9, and 24 are Not Indefinite.**

Claims 1, 4-9 and 24 stand rejected under the second paragraph of 35 U.S.C. §112 as purportedly being indefinite for use of the phrase "... which has the substrate specificity of the sequence shown in SEQ ID NO: 1..." in claims 1, 4, and 8. Applicant does not believe that the claims have two meanings, as suggested by the Office Action. In fact, the Examiner's assumption that the peptides have the same substrate specificity as the protease is correct. Claims 1, 4 and 8 have been amended to recite "'the same substrate specificity" in order to expedite the prosecution of the present claims.

Claims 1, 6, 7, and 24 were also rejected under the second paragraph of 35 U.S.C. §112 as being indefinite for the use of sequences in claim 1 without a corresponding sequence identifier. Claim 1 has been amended to delete the sequences, rendering this ground for rejection moot.

The present claims meet all of the requirements of the second paragraph of 35 U.S.C. §112. Accordingly, the rejections based on indefiniteness should be withdrawn.

**V. Claims 1, 6, and 24 are Supported by an Enabling Written Description.**

Claims 1, 6, 7, and 24 stand rejected under the first paragraph of 35 U.S.C. §112 for lack of enablement. This rejection is unjustified. Applicant notes that claim 3 was not included in this rejection. Claim 1 has been amended to incorporate the limitation of claim 3, which has now been cancelled. As currently amended, claim 1 is directed to an isolated peptide having the sequence shown in SEQ ID NO: 1 or a sequence having at least 95% identity with SEQ ID NO: 1, which has the same substrate specificity as SEQ ID NO: 1.

The scope of claim 1 is commensurate with the enablement provided by the disclosure, since the 95% identity limitation encompasses a finite family of peptides that are closely related to SEQ ID NO: 1. In addition, the limitation that the peptide have the same substrate specificity as SEQ ID NO: 1, further defines the scope of the claim. One of ordinary skill in the art can readily determine whether a peptide has at least 95% identity to SEQ ID NO: 1, and can routinely screen potential candidates for substrate specificity as described in the specification, without undue experimentation. In like manner, the scope of claims 6, 7, and 24 is also supported by the specification, since these claims depend on claim 1 and place further limitations on the claimed invention, which are fully described by the specification.

Claims 1, 6, and 24 stand rejected under the first paragraph of 35 U.S.C. §112 as purportedly encompassing subject matter that is not described in the specification. As discussed above, claim 1 is narrowly drawn to the peptide of SEQ ID NO: 1 and closely related peptides (95% identity) that have the same substrate specificity as SEQ ID NO: 1. Amended claim 1 includes the limitation of claim 3 (now cancelled), which was not included in this ground for rejection. The specification provides adequate guidance as to the identity of peptides within the scope of the claims for one of skill in the art to recognize that Applicants were in possession of the claimed invention at the time the application was filed. The peptide having the amino acid sequence of SEQ ID NO: 1 is fully described in the application. One of ordinary skill in the art would readily recognize SEQ ID NO: 1 as providing adequate representation of the group of peptides having at least 95% identity with SEQ ID NO: 1, and having the same substrate specificity as SEQ ID NO: 1.

Accordingly, all of the present claims are supported by an enabling written description, and the rejections for lack of enablement and insufficient written description should be withdrawn.

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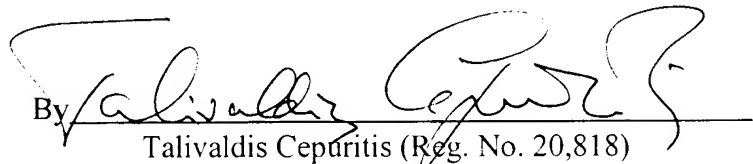
**VI. Conclusion.**

Claims 1, 4-9 and 24 meet all of the requirements of 35 U.S.C. §112.

Reconsideration and early passage of this application to issue is earnestly solicited.

Respectfully submitted,

August 27, 2003

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